

AMENDMENT UNDER 37 C.F.R. § 1.116
APPLICATION NO. 09/556,517
ATTORNEY DOCKET NO. Q58755

IN THE CLAIMS:

This set of claims is a clean set of pending claims 16-23, 25-27, and 86-97, consolidating any previous versions of pending claims into this single clean version, with changes made in this response being shown in the Appendix.

16. (Amended) A local router comprising:

network communications means which can connect to a communications network and has a plurality of IP addresses representing a plurality of locations on the network and which responds to a communications message addressed to any of the plurality of IP addresses; and

data transfer means which can transfer the data included in a communications message addressed to any of the plurality of IP addresses to a plurality of destinations and selects destinations of the data according to the IP address of the communication message.

17. (Amended) The local router as defined in Claim 16, wherein the local router can connect itself to one or more network-incompatible devices, and the selected network-incompatible devices are included in the destinations, wherein the one or more network-incompatible devices cannot be directly connected to said communications network.

18. The local router as defined in Claim 17, wherein the devices are printers.

19. (Amended) The local router as defined in any one of claims 16 through 18, wherein the network uses a TCP/IP protocol, and the network communications means has said plurality of IP addresses, a plurality of port numbers, or a plurality of identifiers as a plurality of network addresses and responds to a packet which is received from the network and includes any of the plurality of IP addresses, the port numbers, and the identifiers, and wherein the data transfer means selects a destination to which data included in the packet are transferred, according to the

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IP address, port number, or identifier of the packet including any of the plurality of IP addresses, the port numbers and the identifiers.

20. (Amended two times) A local router relaying method comprising:
a step of responding to a communications message which is received from a communications network and is addressed to the router at any one of a plurality of predetermined IP addresses of the router; and
a step of selecting the destination of data included in the communications message in response to the network address included in the communications message addressed to any one of the plurality of IP addresses.

21. (Amended) A network printer which can connect to a communications network, comprising:

network communications means which have a plurality of IP addresses representing a plurality of locations on the network and which respond to a communications message received from the network and addressed to any one of the plurality of network addresses;

data transfer means which can transfer to a plurality of destinations the data included in the communications message addressed to any one of the plurality of IP addresses and which determines whether to transfer the data to the destination according to the IP address of the communications message;

print means which processes and prints the data as at least one destination of the plurality of destinations; and

connection means for connecting the printer to a network-incompatible device as at least one of the plurality of destinations, wherein the network-incompatible device cannot be connected directly to the communications network.

22. The network printer as defined in Claim 21, wherein the device is another printer.

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23. (Amended) A network printer which can connect to a communications network and is communicable with a host provided on the network, comprising:

relaying means which can connect to other devices, has all the IP addresses assigned to a device group including the network printer and the devices, and relays communication between the host and the plurality of devices pertaining to the device group, in response to communication which is sent from the host.

25. (Amended two times) A computer readable program recording medium having recorded thereon a computer program used when a computer executes a local router relaying method, the program comprising:

a step of responding to a communications message which is received from a communications network and is addressed to the router at any one of a plurality of predetermined IP addresses of the router; and

a step of selecting the destination of the data included in the communications message in response to the IP address included in the communications message addressed to any one of the plurality of IP addresses.

26. (Amended) A computer readable program recording medium having recorded thereon a computer program used when a computer implements a network printer which can connect to a communications network, the printer comprising:

network communications means which have a plurality of IP addresses representing a plurality of locations on the network and which responds to a communications message received from the network and addressed to any one of the plurality of IP addresses;

data transfer means which can transfer to a plurality of destinations the data included in the communications message addressed to any one of the plurality of IP addresses and which determines whether to transfer the data to the destination according to the IP address of the communications message;

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print means which processes and prints the data as at least one destination of the plurality of destinations; and

connection means for connecting the printer to a network-incompatible device as at least one of the plurality of destinations, wherein the network-incompatible device cannot be connected directly to the communications network.

27. (Amended) A computer readable program recording medium having recorded thereon a computer program used when a computer implements a network printer which can connect to a communications network and is communicable with a host provided on the network, the printer comprising:

relaying means which can connect to other devices, has all the IP addresses assigned to a device group including the network printer and the devices, and relays communication between the host and the plurality of devices pertaining to the device group, in response to communication which is sent from the host.

86. A local router adapted to make accessible to a network one or more connected printers, comprising:

network communications means for connecting to an IP-addressed communications network, and for receiving communications messages addressed to any of a predetermined set of different network addresses;

printer selection means for making a selection of one of said one or more connected printers based on the network address in a received one of said communication messages; and

data transfer means for transferring data from said received one of said communication messages to said selected one of said one or more connected printers over a respective printer interface;

wherein said respective printer interface is not an IP-addressed connection.

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87. The local router as set forth in claim 86, wherein the local router further comprises internal means for printing, also selectable based on said network address in said received one of said communications messages.

88. The local router as set forth in any one of claims 86 through 87, wherein said predetermined set of different network addresses are different IP addresses.

89. The local router as set forth in any one of claims 86 through 87, wherein said predetermined set of different network addresses have the same IP address but differ by port numbers.

90. The local router as set forth in any one of claims 86 through 87, wherein said predetermined set of different network addresses have the same IP address but differ by packet identifiers.

91. A relaying method for a local router for making accessible to a network one or more connected printers, comprising:

receiving IP-addressed communications messages addressed to any of a predetermined plurality of different network addresses;

making a selection of one of said one or more connected printers based on the network address in a received one of said communication messages; and

transferring data from said received one of said communication messages to said selected one of said one or more connected printers over a respective printer interface;

wherein said respective printer interface is not an IP-addressed connection.

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92. The local router as set forth in claim 91, wherein said predetermined set of different network addresses are different IP addresses.

93. The local router as set forth in claim 91, wherein said predetermined set of different network addresses have the same IP address but differ by port numbers.

94. The local router as set forth in claim 91, wherein said predetermined set of different network addresses have the same IP address but differ by packet identifiers.

95. A network printing system, comprising:

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a network printer connected to an IP-addressed communications network;

one or more other devices in communication with said network printer but not connected to said communications network;

said network printer and said one or more other devices defining a device group;

said device group having respective addresses for said network printer and each of said one or more other devices, defining a predetermined set of addresses;

said network printer accepting any communication message with a message address header indicating one of said predetermined set of addresses;

when said message address header indicates one of said one or more devices, said network printer selectively relaying data from said accepted communication message to said indicated one of said one or more other devices; and

when said message address header indicates said network printer, said network printer processing said data from said accepted communication message.

96. The network printing system as set forth in claim 95, wherein said one or more devices are printers.

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97. A computer readable program recording medium having recorded thereon a computer program used when a computer executes a local router relaying method, the program comprising:

- a step for receiving IP-addressed communications messages addressed to any of a predetermined plurality of different network addresses;
- a step for making a selection of one of said one or more connected printers based on the network address in a received one of said communication messages; and
- a step for transferring data from said received one of said communication messages to said selected one of said one or more connected printers over a respective printer interface;

wherein said respective printer interface is not an IP-addressed connection.